

IN THE CLAIMS:

1. (currently amended) A signal processing unit for a digital TV system, comprising:

a first device which acts on a video signal ~~with~~ by overlaying graphical picture elements and text characters onto an input video signal to produce a first device output video signal;

a second device which converts a frame rate of the first device output video signal to produce an increased frame rate video signal;

a picture storage device accessed by the first and second devices during processing of the video signal and first device output video signal, respectively, for storing and retrieving picture data for the first and second devices; and

a driver stage which drives a display responsive to the increased frame rate video signal.

Claim 2. (canceled)

3. (previously presented) The signal processing unit of Claim 1, wherein the second device increases the frame rate of the first device output video signal by retrieving a preceding picture stored in the picture storage device and reproducing said preceding picture.

4. (previously presented) The signal processing unit of Claim 1, wherein the second device varies the frame rate by retrieving an intermediate picture stored in the picture storage device and reproducing said intermediate picture, the intermediate picture calculated by motion evaluation and picture interpolation using preceding pictures.

5. (previously presented) The signal processing unit of Claim 1, wherein the second device freely varies the picture format by retrieving pixel intermediate values stored in the picture storage device, and reproducing the pixel intermediate values, the pixel intermediate values calculated by motion evaluation and pixel interpolation based on preceding pictures.

6. (previously presented) The signal processing unit of Claim 1, wherein the second device converts a picture scan mode of the incoming video signal from interlaced to progressive scan by retrieving intermediate pictures stored in the picture storage device and reproducing the intermediate pictures, the intermediate pictures calculated by motion evaluation and picture interpolation based on preceding pictures.

7. (original) The signal processing unit of Claim 1, further comprising:
at least one input stage for receiving compressed picture data from
at least one transmission medium; and
at least one decoding unit for converting the picture data into digital
pixel data of an overall data stream which is fed to the first device.

8. (currently amended) A method for processing a digital TV system signal, comprising:

acting by a first device on an input video signal ~~with~~ by overlaying graphical picture elements and text characters to produce a processed video signal, wherein the first device stores and retrieves picture data from a common storage device;

increasing by a second device the frame rate of the processed video signal to produce an increased frame rate video signal, wherein the second device stores and retrieves picture data from the common storage device; and

driving a display responsive to the increased frame rate video signal.

Claim 9. (canceled)

10. (previously presented) The method of Claim 8, wherein increasing the frame rate of the processed video signal comprises:

retrieving a stored preceding picture; and

reproducing said preceding picture.

11. (previously presented) The method of Claim 8, wherein the frame rate is varied by retrieving a stored intermediate picture and reproducing said intermediate picture, the intermediate picture calculated by motion evaluation and picture interpolation using preceding pictures.

12. (previously presented) The method of Claim 8, wherein picture format is varied by retrieving stored pixel intermediate values, and reproducing the pixel intermediate values, the pixel intermediate values calculated by motion evaluation and pixel interpolation based on preceding pictures.

13. (previously presented) The method of Claim 8, wherein a picture scan mode of the input video signal is converted from interlaced to progressive scan by retrieving intermediate pictures stored in the picture storage device and reproducing the intermediate pictures, the intermediate pictures calculated by motion evaluation and picture interpolation based on preceding pictures.

14. (original) The method of Claim 8, further comprising:
receiving, in at least one input stage, compressed picture data from at least one transmission medium; and
converting, at least one decoding unit, the picture data into digital pixel data of an overall data stream to form the input video signal.

15. (currently amended) A signal processing unit for a digital TV system, comprising:
- (a) a common storage device for storing and retrieving picture data;
 - (b) a first device for acting on an input video signal by overlaying graphical picture elements and text characters to produce a processed video signal, wherein the first device stores and retrieves picture data from the common storage device; and
 - (c) a second device for increasing a frame rate of the processed video signal, wherein the second device stores and retrieves picture data from the common storage device.